



BURST FIRED TEMPERATURE CONTROLLER 16A

ZVT-16

X10211

INTRODUCTION

This economical and energy-saving OEM temperature controller combines precision sensing to give powerful output in a compact, single-hole fixing enclosure. It outperforms conventional thermostats by switching energy in complete mains cycle packets at zero voltage, eliminating radio- and mains-borne interference. Proportional self-adjustment gives accurate temperature control of loads up to 16A, with appropriate installation and the use of an additional heatsink (see cooling requirements). The controller is supplied with a knob and ZVT scaled dial (0 to 150°C). The NTC temperature sensor is ordered separately and is not included with the unit.

NOTE: It is important that the sensor is used with a bonded earth (see installation wiring).

APPLICATIONS

Suitable for temperature control of single-phase resistive heaters, ovens, dryers, hot plates and flexible heater mats.

FEATURES

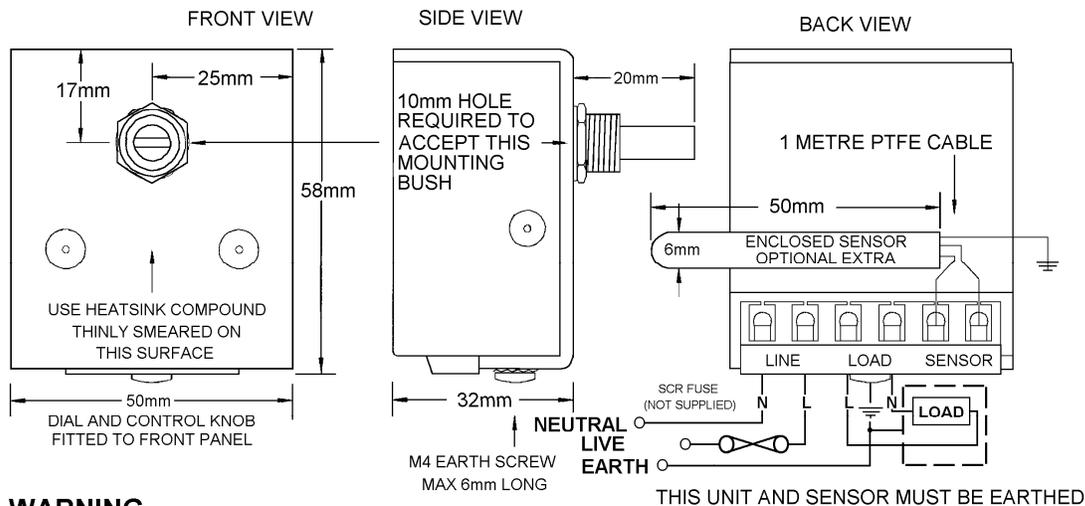
- Accurate, proportional control.
- Compact and easy to use.
- Simple installation - with or without heatsink.
- Discrete components - giving high reliability.
- Fail-safe sensor input.

RoHS Compliant



INSTALLATION

DIMENSIONS AND CONNECTIONS



WARNING

LIVE TERMINALS - SWITCH OFF SUPPLY BEFORE COMMENCING ANY SERVICE WORK.

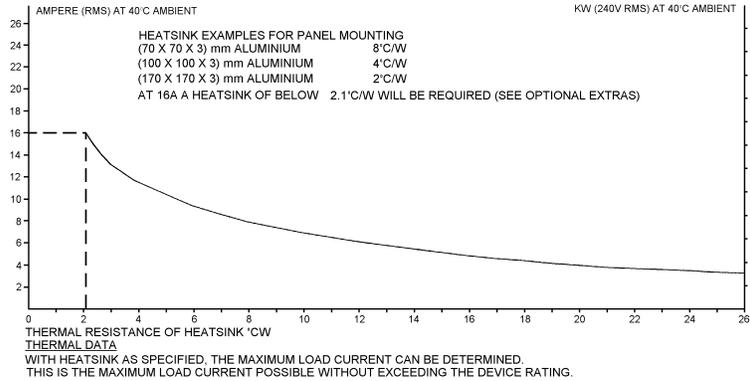
THE SENSOR IS NOT ISOLATED FROM THE MAINS SUPPLY. ADDITIONAL MEASURES SHOULD BE TAKEN TO ENSURE SAFETY IS MAINTAINED UPON INSTALLATION AND COMMISSIONING.

NOTE FOR HEATSINK MOUNTING.

A 10mm HOLE IS REQUIRED TO ACCEPT MOUNTING BUSH.

USE HEATSINK COMPOUND FOR EFFECTIVE THERMAL COUPLING.

COOLING REQUIREMENTS



SPECIFICATIONS

Maximum rms on-state current	16A	Operation temperature range	0 to +65°C
Peak single cycle surge current	200A	Storage temperature range	0 to +65°C
I ² t for fusing	128A ² s	Control stability (typical)	1%
Maximum line voltage +/- 10% @ 50/60Hz (ZVT2/ZVT1)	230V/110V ac	Weight	125g
Maximum power consumption	6W	NTC type sensor	Must be earthed
Temperature control range	0-150°C		
Calibration accuracy (of full scale)	3%	further dimensions	
Isolation voltage (typical)	2500V rms	Shaft diameter (1/4 inch)	6.3mm
Proportional band (rear screw adjust ,typical)	5-15%	Shaft projection from bush	13.0mm
Scale (54 x 46mm, linear and adhesive backed)	0 to +150°C	Bush length	7.0mm
Maximum CSA cable entry	2.5mm ²	Fixing hole diameter	10.0mm

FUSING

It is recommended that semiconductor, fast-acting type fuses or circuit breakers (semiconductor MCB) be used for unit protection. On initial operation, some loads may need an increased factor of safety for unit and/or device protection (see SRA datasheet for further information).

CE MARKING

This product family carries a CE mark. For information - see recommendation section and contact our sales desk (see the Declaration of Conformity). This model does not comply with the flicker standards BS EN 6100-3-3.

RECOMMENDATION

Other documents, which may be appropriate for your applications, are available on request.

CODE	IDENTITY	DESCRIPTION
X10229	RFI	Filter recommendations - addressing EMC Directive.
X10213	ITA	Interaction, uses for phase angle and for burst fire control.
X10255	SRA	Safety requirements - addressing the Low Voltage Directive (LVD) including: thermal data/cooling, live parts warning, earth requirements and fusing recommendations.
X10234	ZVT-E-RGT10K	Sensor and ZVT installation data sheet.
P01.1	COS	UAL conditions of sale.

NOTE: It is recommended that installation and maintenance of this equipment should be done with reference to the current edition of the I.E.T. (formally I.E.E.) regulations (BS7671) by suitably qualified/trained personnel. The regulations contain important requirements regarding installation and safety of electrical equipment. Specific installers should refer to local and

ORDER CODE:

Description: ZVT (110V /230V)-16A- (temperature range – 0-150°C)

State part code:

ZVT (1/2)-16-(0-150°C) – Please select required voltage: – 1= 110V & 2 = 230V

Optional extras:

A26011- ZVT-E-10K3A1 Enclosed Sensor

A26012 - ZVT-X-10K3A1 Bead sensor

Z01001 - Heatsink compound (100g) – Thermal bonding paste.



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